DOCUMENT RESUME

ED 097 655 CS 001 402

TITLE Inservice Reading Resource Kit and Project Reading Alert: Package 6--How to Judge Readability of Books (Tape Transcript and Student's Workbook).

INSTITUTION New York State Education Dept., Albany. Bureau of Reading Education.

PUB DATE 74

NOTE 35p.; See related documents CS 001 397-401

EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTORS Elementary Education; Individualized Reading; *Inservice Teacher Education; *Readability; *Reading Diagnosis; Reading Improvement; *Reading Instruction; Reading Material Selection; Reading Programs; Reading Skills

IDENTIFIERS Fry Readability Graph; *Project Alert

ABSTRACT

Developed and coordinated by the Bureau of Reading Education of the New York State Education Department, Project Alert is a statewide inservice program to facilitate instituting or improving the diagnostic-prescriptive approach to reading instruction. As part of this program, a reading resource kit was prepared by the bureau to give structure and direction to the projects in the local schools. This multimedia kit presently has six packages, with three more to be prepared. Each of the packages in the kit analyzes one skills topic in reading. "How to Judge Readability of Books," the sixth package, describes one method for estimating the readability of a book, the Fry Readability Graph. The steps needed to learn to use the graph are presented, accompanied by several exercises to be performed. An overview of Project Alert and the administrator's handbook, which describes the intended uses of the packages, are included with each package. (TO)

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

ED 097655

Inservice Reading Resource Kit

and

Project Reading ALERT*

Package 6--How to Judge Readability of Books

(Tape Transcript and Student's Workbook)

Bureau of Reading Education

New York State Education Department

Washington Avenue

Albany, New York 12224

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY

New York State Education Department

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER

* Project Alert was organized, supervised and evaluated by members of the Reading Bureau, under the direction of Mrs. Jane Algozzine, Chief of the Bureau.

CS 001 402

Overview of Project Alert

Thomas Fitzgerald

Associate, Reading Bureau

State Education Department

Albany, New York

Project Reading Alert is a statewide inservice program with the objective of instituting or improving the diagnostic-prescriptive approach to reading instruction. In an effort to increase the impact of inservice programs, this project has been developed and coordinated by the Bureau of Reading Education of the New York State Education Department. Many previous inservice programs utilized outside speakers for short-term lecture courses which had little emphasis on demonstrations of classroom techniques. Project Alert is structured to overcome the widespread negative response of teachers to traditional inservice arrangements. For this reason the project has several unique features:

1. Classroom teachers are used to facilitate and guide inservice programs.
2. The emphasis is placed on the self-direction of teachers in determining content of the inservice program.
3. The emphasis is placed on classroom demonstrations of new techniques.
4. Finally, 50 school districts are cooperating and sharing inservice

materials and objectives.

Project Alert has been structured in three phases, each training a group of teachers who, in turn, have initiated an inservice program for other teachers. Through this "ripple" effect, it is expected that approximately 5,000 teachers will be exposed to the reading inservice program. The first phase of Project Alert, funded through ESEA, Title I funds, brought together the 50 directors of the summer programs for a 2-week workshop in March 1972. The participants focused on three main activities:

1. Exploring, critiquing, and utilizing the "Reading Resource Kit",
2. Refining inservice models for each of the 50 projects, and
3. Investigating additional diagnostic-prescriptive techniques by reviewing new commercial material and visiting school programs.

The 50 reading specialists returned to their communities to direct the second phase of the project, a summer instructional program for children in Title I. ESEA programs and inservice training for 670 Title I ESEA teachers in the summer program. This second phase was also funded through Title I, ESEA. As the director facilitated, guided, and evaluated, the teachers designed their inservice program to meet their own needs in the classroom: diagnosis, prescription, evaluation, and management. The spirit of experimentation was encouraged through classroom demonstrations, shared instructional responsibilities, and self-evaluation. The Reading Resource

Kit and commercial material provided the focal point for teachers' discussions and team projects. An important objective of the summer phase was to prepare the teachers to organize and facilitate inservice programs this past academic year (1972-73) in their individual schools. The teachers trained during the summer returned to their buildings as teachers-leaders with the responsibility of organizing an inservice program for their fellow teachers.

Throughout this program, commercial and locally developed materials were used to assist teachers. The Bureau of Reading Education prepared a Reading Resource Kit to give added structure and direction for the 50 projects. This multimedia kit presently has six packages which permits the teacher to select areas of interest and needs, and to work through the readings, tasks, and evaluations. This may be done independently or in a group, depending on the desired organization of inservice in that building.

The Reading Resource Kit provided structural guidelines for developing a reading program based on individual needs of students as advocated by the Regents position paper on reading. Inservice leaders used the kit as a springboard for evaluating and improving the skills and techniques of the teachers. Other inservice materials will be used to expand the program as the needs of the teachers indicate. The kit is not designed as a complete teaching resource nor as a complete reading program for a school system.

The kit's central focus is the development of a diagnostic-prescriptive approach to classroom reading instruction. Each of the packages in the kit analyzes one skills topic in reading. The following is an outline of the contents of the packages:

I. The Recognition of Readiness

II. The Informal Reading Inventory

1. How to Construct
2. How to Administer with a Demonstration of Procedures
3. Recording Scores

III. Diagnosis of Word Recognition Ability

1. Techniques for Testing
2. Interpretation of Tests
3. Available Materials

IV. Assessment of Listening Skills

V. Classroom Management

1. Data Collection: Organization and Use
2. Facilities
3. Instruction

VI. Fry Readability Index

VII. Improving Comprehension Through Questioning Techniques (available 1974)

VIII. Reading in the Content Areas (available 1974)

IX. Prescription in Word Recognition Skills (available 1974)

With this brief overview of the components and activities of Project ALERT, one of the six available packages is presented following the Administrator's Handbook which describes the intended uses of the packages.

Administrator's Handbook

for

Inservice Reading Resource Kit

Gratitude is expressed to those writers who helped prepare individual packages and provided inspiration and creativity as they wrote the narratives, planned the sequences, and arranged the tasks for the Inservice Reading Resource Kit. Appreciation goes to:

PHOEBE LAZARUS -Supervisor of Special Education, BOCES -Nassau County, for the Readign Readiness Package

DOROTHY OHNMACHT -Assistant Professor of Education at Russell Sage College, for the Informal Reading Inventory

JANE COLLIS -Former Director of Reading in Holland Patent Schools, for Diagnosis of Word Recognition Ability

FRANCIS HODGE -Assistant Director, Two-Year College Student Development Center, for Assessment of Listening Comprehension

BERYL SHEADMAN -District Supervisor of Reading, District #3 Huntington, Long Island, and THOMAS FITZGERALD, Associate in Reading Education, for Classroom Management

EDWARD FRY -Director of Reading Center, Rutgers University, for Readability Index

The narratives for the cassettes were read by:

SARA PITT -Reading Specialist, former teacher at Albany High School

PHILIP MORRISON -Associate in Educational Communications

The writing-editing staff consisted of Sara Pitt, Agnes Holleran, former English Department Chairman at Cohoes High School, and Ellen Murphy, English teacher. They contributed to the clarity, conciseness, and accuracy of narratives, tapes, and workbooks.

Appreciation also is due to the staffs in the State Education Department units: Mass Communication, Audio Visual Center, and Publications for exceeding their roles in producing materials. Special mention is given to Helen Marion and Jean Spawn of the Guilderland Central School District and to William Neiger of Shaker High School, Latham, for their kind cooperation in making the production possible.

This resource kit was prepared under the direction of ALBERTA C. PATCH, Associate, Bureau of Reading Education.

Other members of the State Education Department who gave generously of their time in a consultant capacity are:

CATHERINE BAILEY, Associate, Division of Research and Educational Communications

THOMAS FITZGERALD, Associate, Bureau of Reading Education

DOROTHY FOLEY, Associate, Bureau of Elementary Curriculum

VIRGINIA FRANSECKY, Associate, Bureau of Reading Education

WILLIAM HETZER, Associate, Bureau of Educational Television

ROBERT JOHNSTONE, Chief, Bureau of Elementary Curriculum

FRANCES MORRIS, Associate, Bureau of Reading Education

PAULA ROLLINS, Associate, Bureau of Reading Education.

FOREWORD

The idea for the Inservice Reading Resource Kit for classroom teachers was first conceived in the Bureau of Reading Education in 1970. At that time the need to reach far more teachers than is presently possible through inservice local workshops or through the limited number of collegiate programs available to a district became evident. This led to a decision to develop a series of learning packages, for use by individual teachers or by small groups of teachers, While they are designed to be self-directed and self-paced, it is hoped that they will be used whenever possible under the direction of a competent reading consultant or director of curriculum. The first six packages completed in the series deal primarily with diagnostic techniques useful in the classroom, the evaluation of the approximate difficulty of materials and the organization of a classroom to provide individualized instruction and thus fill the identified needs of the learner.

These packages are intended to serve as tools and to expand the capacity of the State Education Department to reach all teachers in New York State concerned with providing the highest quality of instruction. It is our hope that these materials, used in proper perspective and supplemented by other means for improving the teacher's effectiveness in the classroom reading program, will enable the school districts to implement the program proposed in the Regent's Position Paper No. 12, Reading, published in July, 1971.

Jane Algozzine

Jane Algozzine, Chief
Bureau of Reading Education

INTRODUCTION

Does your teaching staff need help in:

---constructing and administering diagnostic reading tests
---individualizing reading instruction
---determining the readability level of materials
---determining reading readiness of individual students
---testing word recognition ability
---developing communication skills related to reading---such as those found in listening
---designing programs for students based on their abilities and needs

Do you find it difficult, if not prohibitive, to get the time, facilities, and resources needed to provide such help?

The Inservice Reading Resource Kit provides low-cost, on-the-job training to assist classroom teachers in individualizing reading programs. Flexibility is an important feature of the multi-media approach. Since the program is self-administering and self-instructional, the teacher can schedule his own learning time and place, can adjust the materials and the pace to fit his own needs, using as many or as few of the components as he chooses. The only facilities needed for the program are a cassette playback recorder, a pencil, working space, and either a 16mm film projector or a one inch video tape-projector, preferably one which includes a monitor.

Few bibliographical references are included in the kit since they tend to become out dated rather rapidly and lists may be interpreted as restrictive. Administrators are urged to keep information about up-to-data professional resource materials readily available. The school Reading Coordinator can suggest specific materials on request.

Self-Instructional Inservice Reading Kit: A Resource for Developing Diagnostic-Prescriptive Techniques in Classroom Teaching of Reading'

Objectives for Use

...Administrators and reading supervisors will be able to offer a resource packet to classroom teachers to assist them in individualizing their reading programs.

...Administrators and reading supervisors will be able to plan a self-instructional in-service reading course for classroom teachers.

...Classroom teachers will be able to use these multi-media packages independently to develop expertise in individualizing reading instruction.

...The classroom teacher will be able to use the packages in this resource kit to instruct herself in:

- ...assessing student readiness for learning to read
- ...constructing appropriate diagnostic reading instruments
- ...determining suitable reading materials for students
- ...prescribing appropriate reading tasks and programs for students
- ...recording reading progress and maintaining records for students
- ...selecting classroom management procedures appropriate to specific needs

The Inservice Reading Resource Kit is intended to serve as a spring board, helping the classroom teacher to diagnose students' reading proficiency and to prescribe appropriate programs for every child in a range of from-below-to-above-average achievement. It is not meant to be a clinical instrument. Intentionally, it oversimplifies techniques for diagnosis, holding to the thesis that as a teacher gains expertise, he will become aware of questions which are raised by specialists in the field, and will pursue sophisticated procedures at greater depth than is undertaken in this foundation study.

OVERVIEW OF CONTENTS

Package I — The Recognition of Readiness (Beginning Reading Level)

This package deals with means of determining a child's development in mastery of the skills essential to learning to read. It provides a set of axioms or generalizations about the process of reading which should help the teacher to identify the child's point of readiness. Suggestions are given for certain tasks which will aid the teacher in prescribing appropriate instruction to meet those needs.

Package II — The Informal Reading Inventory

This package explains how to construct and how to administer the informal reading inventory which is a most useful instrument in providing appropriate placement for students in materials and in the reading skills sequence. It helps diagnose strengths and weaknesses giving the teacher insight into the individual's learning needs. A video tape or 30 mm film demonstrating procedures accompanies the package.

Package III — Diagnosis of Word Recognition

This package goes into detail in the techniques of testing word recognition. Materials are suggested. Interpretations of results are provided as guidelines for teachers. Actual test situations have been recorded on cassette tapes.

Package IV — Assessment of Listening Skills

This package presents materials for assessing the child's listening comprehension level. Sample exercises, scoring devices, and samples of question techniques are included. This is the first of several packages dealing with communication skills which are related to the reading process. (The other packages are to be developed at a later time).

Package V — Classroom Management

This package deals with three major concerns in classroom management. Section I focuses on data collection. The teacher learns how to organize and use information about students' reading skills. Section II deals with classroom facilities and staffing. Section III is directed toward instructional procedures.

Package VI — The Fry Readability Index

This package is a working tape and study book to teach the Fry Readability Index, which is one of many methods used to determine a textbook's level of reading difficulty.

Suggestions for Use of Resource Kit

Situation I

A beginning elementary classroom teacher has had little or no background in the teaching of reading. She asks for help in organizing her classroom. The principal of her school calls the Inservice Reading Resource Kit to her attention, and he helps her arrange a schedule for using it after school in the library of the school on two days each week. He asks her to keep a log which will show any value this resource may have in improving her own effectiveness in the classroom and asks her reading teacher to assist her in her use of this kit.

Situation II

A team of social studies teachers in a middle school is concerned with the suitability of textbooks for the students. The department chairman schedules meetings for them to use the resource kit and learn how to determine the readability difficulty of the texts. They learn from the resource kit how to do informal testing to find the students' reading instructional level. Their findings will be reported to the school principal and to the guidance office to be shared with teachers in other content areas. Recommendations as to the appropriateness of materials will be included in the report and adjustments will be made in selections of texts and in grouping procedures to provide suitable instruction for the students.

Situation III

The curriculum committee of a school district has reported that there has been no recent inservice course in reading for its classroom teachers. A survey of need and a priority list is made. Teachers in greatest need of this service are scheduled through the entire resource kit by the reading supervisor. A salary increment is allowed for inservice credit, according to district policy, when a teacher gives evidence of satisfactorily completing the course.

Situation IV

A langauge-arts social studies team of teachers on a secondary level questions the suitability of the curriculum for the low, average, and above average students in the school. The reading coordinator suggests they use a readability index on texts and supplementary materials. This leads to further study of the Inservice Reading Resource Kit. Among other discoveries, the team determines, after profiling available student test scores, that the above average segment of population is capable of stretched performance. A survey of available resources in school and community is recommended. The team constructs a curriculum of greater range and depth for these students, utilizing suggestions from the packages of the kit in determining needs and prescribing extended opportunities for independent study and individualization.

Inservice Reading Resource Kit

Package VI

HOW TO JUDGE READABILITY OF BOOKS

TAPE TRANSCRIPT

TAPE SCRIPT

USING THE FRY READABILITY GRAPH.

One of your most important jobs as a teacher of reading is selecting the right reading material for your students. If you give a student material that is too hard for him, the student may not be able to understand it and will become bored and stop reading, or he may still struggle through but take an excessive amount of time. On the other hand, if you give a student material that is too easy, he may find it babyish and again become bored and stop reading.

The purpose of this tape is to provide you with a very fast and simple method of estimating the readability of a book. This method uses the Fry Readability Graph. The tape will present the steps that you need to learn to use the graph. From time to time you will be asked to stop the tape and perform certain exercises. The tape is designed to go along with the pamphlet which accompanies it. You will also need a pencil. Turn off the tape to get one now, if necessary.

First turn to page 1 in your booklet. (Pause 3 seconds). On page 1 you will see the Readability Graph, which you will use to make your estimate of the reading level of the book you are interested in grading. Using this graph is really the last step, but by looking at it first, you will have a better idea of the Fry Formula and some of the reasoning behind it.

Recalling your mathematics, you will remember that a graph is a diagram which symbolizes the inter-relations between two variables. In the case of the Fry Readability Graph these variables are the average number of syllables in 100 word selections and the average length of the sentences in the same 100 word selections.

Look at the headings across the top of the graph on page 1. You will notice that they stand for the average number of syllables per 100 words. Selections with fewer syllables will be plotted on the vertical lines on the left-hand side; selections with more syllables will be plotted on the vertical lines on the right-hand side.

Now look at the headings on the side of the graph. They stand for the average number of sentences per 100 words. Selections with short sentences will be plotted along the horizontal lines at the top of the page. Selections with long sentences will be plotted along the horizontal lines at the bottom of the page.

The average number of syllables in a selection is a measure of vocabulary difficulty. Words with few syllables tend to be easier to read than words with several syllables. Vocabulary is probably the most significant determinant of reading comprehension.

The average number of sentences in a selection is a measure of sentence length or complexity. Easy materials generally contain short, simple sentences with few prepositional phrases and clauses. Difficult materials are more likely to contain long and complex sentences. Sentence length is another important determinant of reading comprehension.

By using these two variables--average number of syllables and average number of sentences--a fast, simple, and yet reliable estimate of readability can be made. Another advantage of this estimate is that it is objective. You do not have to rely on your own subjective judgment as to whether a book will be at the right level for a child. Most teachers are not very good at rating books according to an appropriate grade level.

Now that you have had a brief look at the graph, we will tell you more specifically just how you can find the readability level of a book.

Turn to page 2 in your booklet. (Pause 3 seconds).

Look at no. 1 on page 2. The first step is to select a 100-word passage. Normally you would choose the page for this passage at random from the selected book. An easy way to do this is to open the book to a page with your eyes closed. For longer articles and books you would need to select three random pages, one near the beginning, one near the middle, and one near the end.

Look at no. 2 on page 2. In order to count out 100 words you begin with the first whole sentence. If the page begins in the middle of a sentence, skip the words in that sentence. Start with the first word of the first whole sentence. Look at no. 3. Do not count headings, poetry, graphs, tables, or lists as part of your 100 words. If these should occur in the middle of a selection you are testing, merely skip them and continue down to the next whole sentence. The Fry Readability Graph can be used only with prose.

Count the words beginning with the first whole sentence until you reach 100 words. Normally it will be easy to tell when a word is a word, but in some instances there are questions. Look at numbers 4, 5, 6 and 7. These are the guides you should follow:

Include all proper names.

Include abbreviations, such as Mr., counting them as one word, and as one syllable.

Count written numbers as you would words. But if numbers are printed with numerals omit them. Do not count them at all.

Hyphenated words, such as "multiple-choice", are counted as one word.

Look at no. 8. Put a vertical line in front of the first word you count and a vertical line after the last word you count. All of these rules have been listed on page 2 in your booklet. If you wish, you may refer to this page during the exercise we are going to give you.

Now turn to page 3 in your booklet. (Pause 3 seconds). Pretend that you are going to estimate the readability of a book and have just turned at random to this page. Following the directions we just gave you, count out 100 words. When you have finished, turn the tape recorder back on and the correct answer will be given. Turn the tape recorder off now.

----------10 second pause----------

You have just finished counting 100 words on page 3. If you did this correctly, you should have begun with the word Figure in the sentence "Figure 51 shows you the different parts of your ear." as it is the first word in the first whole sentence on the page. You should have stopped when you reached the word of in the sentence beginning "At the end of an s-shaped tube..." The word of is the 100th word. The numerals 51 and the subheading "Within the Ear" should not have been counted as words.

Did you do this correctly? (Pause 3 seconds). If you did it correctly, continue with the tape. If you made an error, please try to find it before going on with the tape. (3 seconds pause).

Now that you have counted out 100 words, the second step is to count off the syllables in the 100-word sample.

Before you do this part, a brief review of syllabication might be helpful. On page 4 in your booklet is a list of common rules of syllabication. Turn to page 4 now. (3 seconds pause).

In no. 1 on page 4 you will notice that words have a syllable for each vowel sound in them.

win dow hy phen po li o

In No. 2 vowel digraphs such as EA, AY, EI and diphthongs, such as OU and OI, make one vowel sound:

through boil re ceipt stay

In no. 3 an e at the end of a word is frequently silent and therefore does not make a separate sound or syllable.

make some like

In no. 4 endings such as -y, -ed, -el, or -le are counted as a separate syllable. Conditions vary on when they are separate syllables in pronunciation; for example, the word "started" has two syllables, but the ed ending sometimes appears to merge with the syllable before it in words such as "harmed" or "ripped". However, for purposes of figuring syllables for readability, harmed is a more difficult word than harm and thus is counted as having two syllables even though the e is silent.

Look at no. 5. When counting syllables for readability purposes, you will find it most convenient to count every syllable over one in each word and then add 100 to the total. A convenient method is to put a slash mark over the additional syllables. Look at the examples on page 4, no. 5. (Pause 3 seconds).

Look at no. 6. Count abbreviations and initials as one-syllable words.

Now turn to page 5. (Pause 3 seconds). Here is a short test in syllabication. If a word has only one syllable, leave it alone. If it has more than one syllable, put a short slash mark over every extra syllable, as has been done in the two example words. The answer will be given when you finish. Turn the tape off now.

----------15 second pause----------

Here are the answers to the Syllable Test One.

potato should have two slash marks over it.

holding should have one slash mark.

roam should have none.

obsolete should have 2.

tricked should have one.

instantaneously should have five.

hummed should have one.

repeat should have one.

though should have none.

The abbreviation for Avenue should have none.

Did you get all the answers right? (3 seconds pause). If you did it correctly, continue with the tape. If you made an error, please try to find it before going on. (3 seconds pause).

The next step is to apply what you have just reviewed about syllabication to the sample paragraph we have given you. Turn back in your booklet to page 3. (Pause 3 seconds). Count the number of syllables in the 100 words you marked off. Remember the easiest way to do this is to leave words that are only one syllable blank and put a slash over each extra syllable in words of more than one syllable. Then, count the number of slashes you have made and add 100 to it. The answer will be given when you finish. Turn the tape recorder off now.

----------10 second pause----------

The selection you have just counted on page 3 has 128 syllables in it. The words with more than one syllable were:

figure	outer	hearing
different	collect	inside
shell-shaped	because	middle
outside	larger	inner
purpose	outer	protected
only	important	against
behind	necessary	injury

Did you do this correctly? (Pause 3 seconds). If you did, continue with the tape. If you made an error, please try to find it before going on with the tape. (Pause 3 seconds).

If you are having trouble with syllables, we suggest that you do not go any further with the tape at this time. You will not be able to test the readability of books accurately unless you are able to count syllables more accurately. We suggest you get hold of a good English book that will enable you to learn how to divide words into syllables.

Pause 3 seconds

So far you have learned how to count off 100 words in a selection and how to count the number of syllables in that group of 100 words. The next step is to count the number of sentences in that 100 word sample. Turn to page 6 in your booklet. (Pause 3 seconds). Sentences always begin with a capital letter and end with a period, question mark, or exclamation point. Groups of words separated by commas, colons, semicolons, or dashes do not make complete sentences.

Look at no. 2. Words within quotes do not necessarily make a complete sentence either. Phrases such as "he said" or "he thought" identifying the speaker, are frequently part of the sentence. For example the following line is a complete sentence. "I think it is going to rain today," said Jim.

Look at line 3. When you count sentences, the whole number of sentences is easy, since you started with the first word of the first whole sentence on the page. But your last word of the 100 words may not always be the last word in a sentence. In this case you have to compute the remaining sentence. To do this count the number of words in that last sentence which are part of your sample 100 words, and then divide it by the total number of words in the sentence. For example, if you had a sentence, "The cat ran after the dog",

and the words "the cat ran" were the last three words of 100, you divide 3, the words in your group of 100, by 6, the total no. of words in the sentence, and get .5 of a sentence. Compute parts of sentences to the nearest tenth.

Turn back to page 3. (Pause 3 seconds). Now compute the number of sentences in the sample page selection on page 3. The answer will be given when you finish. Turn the tape off now.

----------10 second pause----------

The correct number of sentences in this selection is 7.3. There were seven whole sentences, and the first 4 words of the next sentence which had fifteen words in all. 4 divided by 15 equals .26, or rounded off, 3 tenths of a sentence.

Did you do this correctly? (Pause 3 seconds). If you did, continue with the tape. If you made an error, please stop and try to find it before going on with the tape. (Pause 3 seconds).

Now you have learned to figure out both the number of syllables in a 100 word sample and the number of sentences in that 100 word sample. If you were going to compute the readability of a book you would need to use three selections from the book. The selections would be taken at random, opening to any page in the front, the middle, and the back of the book and beginning with the first word of the first whole sentence on the page.

After you had found the number of syllables and number of sentences in those 3 selections you would need to find the average number of syllables and average number of sentences for your three selections. Turn to page 7 in your booklet. (Pause 3 seconds).

Look at the sample problem on page 7. You take the 3 numbers of syllables and add them. You also take the three numbers of sentences and add them.

This gives you two total figures. On page 7 they are 390 syllables and 19.0 sentences.

To figure the average syllables and sentences you would then divide these total numbers by three, the total number of samples you have. The average number of syllables is 130. The average number of sentences is 6.3. (Pause 3 seconds). Now turn to page 8 in your booklet. (Pause 3 seconds). Here are some more examples of samples from a book. In this case more selections were taken because the book appeared to have greater variability. Figure out the average number of syllables and the average number of sentences. The answer will be given when you finish. Turn the tape off now.

----------15 second pause----------

The answers are:

average number of syllables 130

average number of sentences 10.0

Did you remember to divide by 5, because there were 5 samples?

Did you do this correctly? (Pause 3 seconds). If you did, go on with the tape.

If you had any difficulty with this section, we suggest that you do not go any further until you have gained more skill in averaging figures. (Pause 3 seconds).

Once you have computed the average figures for your three or more passages, you are ready for the last step. You are ready to use the graph on page 1. Turn back to page 1 now. (Pause 3 seconds). In order to plot the readability on the graph you take the figure for the average number of syllables and find the corresponding vertical line on the graph. The headings at the top of the graph will help you. After you have found the vertical line for the average number of syllables, you take the figure for

the average number of sentences and find the corresponding horizontal line on the graph. The headings at the left hand side of the graph will help you. Mark with a dot the point at which these two lines meet. It will fall between diagonal lines which indicate the grade level. For example, suppose we had a book with an average number of syllables of 141 and an average number of sentences of 6.3. These figures, 141 syllables and 6.3 sentences, are plotted on the graph and fall between diagonal lines which indicate approximate seventh grade readability level.

Now plot the readability for the averaging problem that we did. The average number of syllables is 130. Average number of sentences is 10.0. The answer will be given when you finish.

----------15 second pause----------

The plot point should fall between the diagonal lines indicating fourth grade readability.

Did you do this correctly? (Pause 3 seconds). If so, continue with the tape. If you made an error, please try to find it before going on with the tape. (Pause 5 seconds).

Now try the following problem. Write the numbers down on a piece of scrap paper and plot them on the graph.

average number of syllables 136

average number of sentences 4.3

The answer will be given when you finish. Turn the tape off now.

----------10 second pause----------

The answer is that the plot point falls in the eighth grade readability sector.

Did you do this correctly? (Pause 3 seconds). If so, continue with the tape.

If you are still having trouble, you need help in learning to plot locations on a graph. We suggest that you do not attempt to use the readability graph until you have obtained further help. (Pause 3 seconds).

You have just learned the necessary steps in using the Fry graph for estimating readability. In order to provide you with some practical experience, we have provided three random selections from the book, Winnie the Pooh by A. A. Milne. You will find them on pages 9, 10 and 11 of the pamphlet. Using these selections, on pages 9, 10 and 11, estimate the readability of this book. The answer will be given when you finish. Turn the tape off now.

----------10 second pause----------

If you did this correctly, you should have found that the three sample pages indicated an estimated readability of fifth grade reading level on the Fry Readability Graph.

Did you do this correctly? If so, continue with the tape. If not, please try to find your error before going on with the tape (Pause 3 seconds)

We hope that you also concluded that these sample passages had extreme variability in sentence length, so that ideally to test the readability, you would choose more passages in the book and would conclude that the book has uneven readability. Perhaps this explains why Winnie the Pooh is more frequently read to children than by them.

Now you know how to use the Fry Readability Graph and will be able to apply this knowledge in your teaching.

Before you start to use the Graph, a few last words about the nature of the readability graph are in order.

What the graph actually does is rank materials according to their relative of difficulty levels. The grade levels that are achieved by using

the Fry graph could be verified by using other readability formulas, a cloze procedure, or other techniques.

Because we are working with only three sample passages in a book, there is bound to be some error in measurement. Such errors are normal in all measuring and testing procedures. However, two-thirds of the time you can expect that the results you arrive at are within one year of the true reading level. This is not perfectly accurate, but it is far more accurate than a teacher's own subjective judgement is likely to be.

Readability formulas are helpful but the ultimate test of readability is whether a particular child can read that book and understand it. The formula only attempts to predict this.

When trying to match particular books to particular children, you would be wise to keep in mind that standardized reading test scores will tend to be higher than the actual readability level of books that a child can handle. For example, a child who gets a standardized test score of 7th grade level will be able to read books for instructional purposes that are on the 6th grade level.

You will find that the readability graph has many uses. For example, you might wish to mark the readability level of books by putting code letters or numbers on their spine, or on the inside cover or on the library catalog card. This is especially useful for books which have high interest and low readability and could be used in remedial reading.

Readability formulas are also important for those teachers, writers, and editors who are preparing material to be read by children. But here a word of caution is in order. Work from high frequency word lists and try for a simple style with many, but not all, short sentences. Simply cutting long sentences in half and making word substitutions, like "ox" for "bullock", might not have the desired effect. Use the readability graph after the passage has been written, not before or during.

With the information on this tape you have just gained an important tool that will help you with one of your most important teaching jobs--finding reading materials on the right levels for your students. The rest is up to you. This is the end of the tape. Good luck. Turn the tape off now.

The In-Service Reading Resource Kit

Package VI

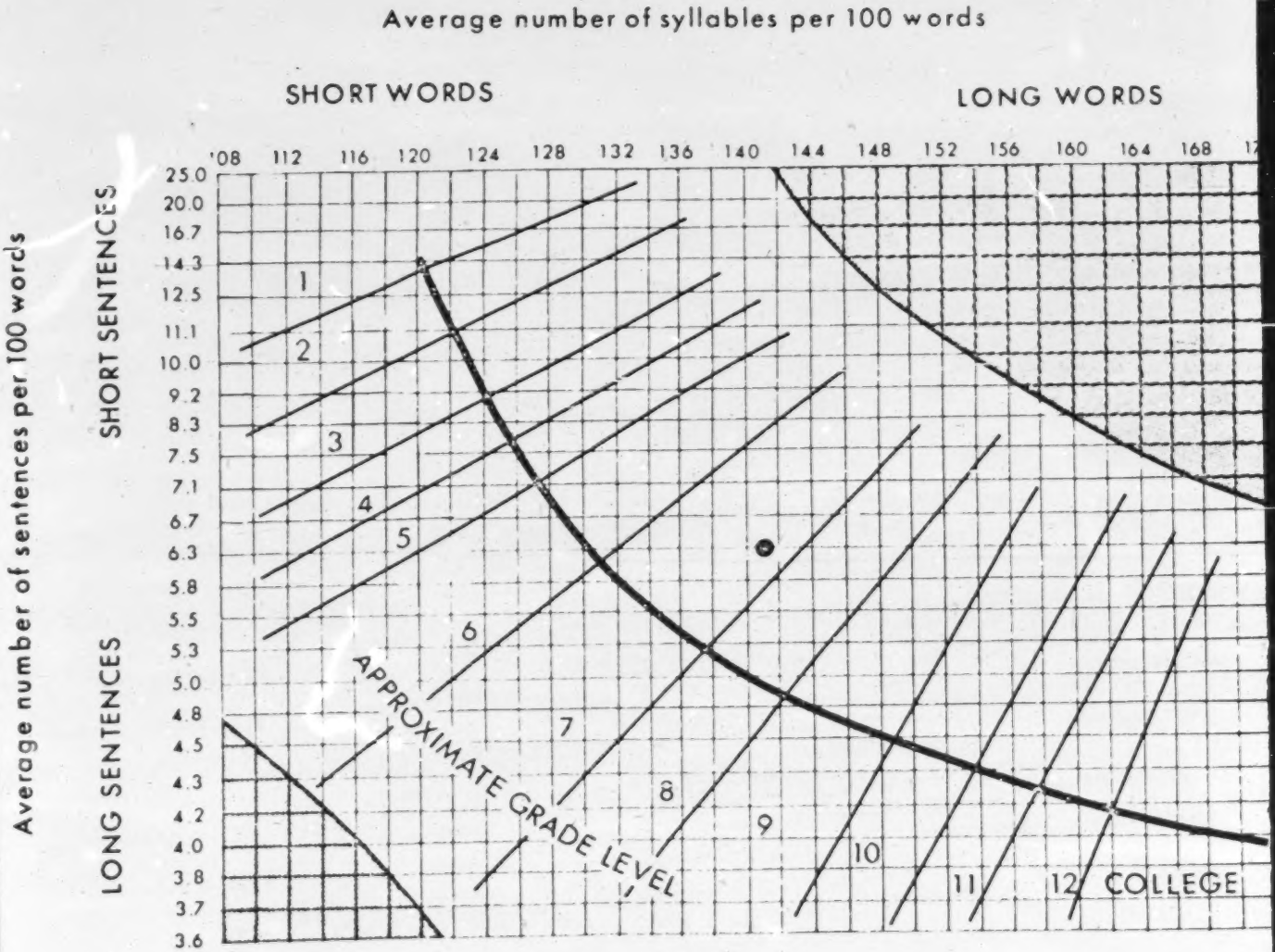
HOW TO JUDGE

READABILITY OF BOOKS

STUDENT's WORKBOOK

GRAPH FOR ESTIMATING READABILITY

by Edward Fry, Rutgers University Reading Center, New Jersey



STEP ONE COUNT 100 WORDS

1. Select page at random.

   (For longer articles or books, select three pages at random: from the beginning, the middle, and the end of the material)

2. Start with the first word of the first whole sentence on the page.

3. Omit the following kinds of materials:

   headings

   poetry

   graphs

   tables

   lists

4. Count proper names as word; e.g., John.

5. Count abbreviations as one word and as one syllable; e.g., Mr.

6. Count written numbers, such as twenty-five, as words. If numbers are printed as numerals (e.g., 25), omit them. Do not include them at all.

7. Count hyphenated words, such as "multiple-choice", as one word.

8. Put a vertical line in front of the first word you count. Put another vertical line after the 100th word that you count.

SAMPLE PAGE

entering your ears.

The Outer Ear

Figure 51 shows you the different parts of your ear. The shell-shaped part of your ear on the outside of your head has one purpose only: to catch sounds. When you cup your hand behind your outer ear, you collect more of the sound because your hand is larger than your ear.

But the outer ear is the least important part of the ear. In fact, if it were not there you would still hear. The necessary parts for hearing are inside, in the middle and inner parts of the ear. They should be protected against injury.

Within The Ear

At the end of an s-shaped tube leading from the outer ear is your eardrum. It is stretched across the entrance to the middle ear. The eardrum is a membrane that moves rapidly back and forth when sound strikes it. It is as important to your hearing as the receiver is to your hearing over the telephone. A little later in this chapter you will find some rules for protecting your eardrum.

TURN THE TAPE BACK ON

from Brandwein, Paul, et. al., You and Your World.,
Harcourt Brace & Co., N. Y., 1956

STEP TWO COUNT SYLLABLES IN 100 WORD SAMPLE

1. Words have a syllable for each vowel sound in them.

   win dow hy phen po li o

2. Vowel digraphs and diphthongs make one vowel sound.

   through boil re ceipt stay

3. An e at the end of a word is frequently silent and therefore does not make a separate syllable.

   make some like

4. Endings such as -y, -ed, -el, or -le are counted as a separate syllable.

   rea dy stop ped bot tle

   Note: In pronunciation conditions vary on when the ed ending is a separate syllable; for example, the word started is two syllables, but the ed ending sometimes just appears to merge with the syllable before it in words such as harmed or ripped. However, for purposes of readability, harmed is a more difficult word than harm and thus is counted as having two syllables.

5. Count every syllable over one in each word and then add 100 to the total. A convenient method is to put a slash mark over the additional syllables

   solo think problem barnacle centralize

   home running

6. Count abbreviations and initials as one-syllable words.

   Mr. Co. Ave. Lb. W.

SYLLABLE TEST 1

examples

bag
/ /
narcissus

1. potato
2. holding
3. roam
4. obsolete
5. tricked
6. instantaneously
7. hummed
8. repeat
9. though
10. Ave.

TURN THE TAPE BACK ON

STEP THREE COUNT SENTENCES IN A 100 WORD SAMPLE

1. Sentences always begin with a capital letter and end with a period, question mark or exclamation point.
2. Phrases identifying the speaker of a sentence are often part of the entire sentence with a quote. For example, the following line is a complete sentence,

   "I think it is going to rain today," said Jim.
3. To compute the last sentence, count the number of words in it that are part of the 100 word sample and then divide that number by the total number of words in the sentence.

100th word
i.e. The cat ran / after the dog.

words that are part of sample = 3

total number of words in sentence = 6

3 divided by 6 = .5

Compute parts of sentences to the nearest tenth.

STEP FOUR AVERAGING THREE 100 WORD SAMPLES

	Syllables	sentences
1st hundred words	130	6.2
2nd hundred words	136	6.0
3rd hundred words	124	6.8
Total	390	19.0
Average	130	6.3

(totals divided by 3)

1. Add the samples
2. Divide the totals by the number of samples.

Averaging problem

	syllables	sentences
1st hundred words	136	8.7
2nd hundred words	134	12.8
3rd hundred words	124	7.6
4th hundred words	127	12.0
5th hundred words	129	9.1

TURN THE TAPE BACK ON

In Which Pooh and Piglet Go Hunting and Nearly Catch a Woozle, taken from: Winnie the Pooh, by A. A. Milne, E. P. Dutton & Co., Inc., New York, 1926, p. 32, removed due to copyright restrictions. Also removed due to copyright restrictions - Selection 2 and 3 - page 72 and p. 136 (excerpts from the same book)